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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,873	01/17/2006	Richard Fargo		3868

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EXAMINER	
KRUER, STEFAN	

ART UNIT	PAPER NUMBER
3654	

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/564,873	FARGO ET AL.	
	Examiner	Art Unit	
	Stefan Kruer	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *17 Jan. 2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 5, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoo (5,307,904).

Re: Claim 1, Yoo discloses:

- A car (2, Fig. 1),
- A counterweight (Col. 2, Line 54),
- A load bearing member (10) supporting the car and counterweight such that the car and counterweight move in opposite directions,
- A termination (including 12, 14, raised, end portion of 10 and undesignated washer(s)) associated with at least one end of load bearing member,
- Wherein a portion (end portion of 10) of the termination moves against a first bias (14) responsive to a tension on the load bearing member below a selected threshold ($K_{14}\, x_{14} + K_{,\,spring\ 30}\, A'$, when $A' = 0$ and where $0 \leq A' \leq A$) and moving against a second, passive bias (spring of 30) responsive to a tension that exceeds the threshold ($K_{14}\, x_{14} + K_{,\,spring\ 30}\, A'$, when $0 < A' \leq A$).

Re: Claim 2, Yoo discloses:

- The termination includes a termination member (end portion of 10) and a support member (12),
- Wherein the termination member moves relative to the support member responsive to the tension below the threshold,
- Wherein the support member moves with the terminating member when the tension exceeds the threshold.

Re: Claims 3 - 5, Yoo discloses:

- A damper (14) that resists movement of the support member and wherein the damper partially absorbs the tension,
- Said damper comprising a mechanical spring,
- Said damper is preloaded, typically known as spring constant, such that the damper prevents the movement of the support member when the tension ion the load bearing member is less than the selected threshold.

Re: Claim 9, Yoo discloses his termination supported for movement with the car.

Re: Claim 12, Yoo discloses his first and second bias members (14, 30), said members being remote from another.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 – 8, 11 and 13 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoo, as applied to Claim 2, and in further view of Fuller et al (6,216,824).

Re: Claims 6 and 13, Yoo discloses:

- Wherein the terminating member and the support member are moveable relative to a stationary surface (6) and wherein the termination includes a tension member (14) near an end (raised portion of 10) of the terminating member that is distal from the load bearing member (10 above 11, Fig. 2) between the distal end and the support member,
- Said tension member biasing the distal end from the support member,
- And a damper (30) on the opposite side of the support member;

however, said damper (30) does not bias the support member away from the stationary surface.

Attention is directed to Fuller et al who teach their terminating member having a stationary member (40) and a support member (46), the latter supporting a tension member (52), and a damper (42A) intermediate and biasing to said members, whereby said damper offers variable-controlled, hydraulic attenuation of vertical oscillations.

It would have been obvious to one of ordinary skill in the art to modify the invention of Yoo with the teaching of Fuller et al to position the damper intermediate of the stationary and support members to attenuate undesirable oscillations of the elevator car for purpose of rider comfort.

Re: Claim 7, Yoo discloses his tension members and damper as springs.

Re: Claim 11, Yoo and Fuller et al are silent regarding the termination having a fixed position in relation to a machine causing selective movement of the car; nevertheless, terminations mounted in vicinity of guide rails and shaft surfaces, thereby maintaining a fixed position in relation to the elevator machine, are well known in the art.

Re: Claims 8, 16 and 17, whereas Yoo discloses his support member as a plank-like element, his support member lacks the guide structure of the instant invention.

Attention is directed to Fuller et al who teach their support element comprising both a plank (46) and guide structures (48), whereby said guide structure support said plank and permit movement of said plank toward the stationary surface when the tension exceeds the threshold.

It would have been obvious to one of ordinary skill in the art to modify the invention of Yoo with the teaching of Fuller et al to provide the support element with a plank and guide structure, for provision of a load bearing surface directly responsive to the counteracting dampers, as a further means to dissipate energies related to oscillations for the enhancement of rider comfort.

Re: Claim 14, though Yoo discloses his terminating member having a clamping mechanism (11), he is silent regarding a thimble rod as known to the art.

Fuller et al teaches his terminating member having thimble rods (49). It would have been obvious to one of ordinary skill in the art to provide the invention of Yoo with the thimble rods as taught by Fuller et al and as known in the art.

Re: Claim 15, Yoo discloses his first and second biasing members as springs.

Re: Claim 18 and 19, Yoo is silent regarding a preloading or stiffness of his biasing members and, as reviewed in Claim 16, does not disclose a guide structure for his support member.

Fuller et al teaches his first and second biasing means having unique stiffness, whereby his second biasing means offers a "...soft spring..." whereby its "...spring constant is less than half that of the rope..." as a means to dampen relatively low frequency (Col. 5, Lines 30 and 55), whereby their first biasing means supports the weight of the elevator car without the need for engagement of the second biasing means (Col. 4, Line 66).

Furthermore, Fuller et al teach their control circuitry (Fig. 5) whereby the variable orifice valve (44) is controlled, and therein the second biasing means, whereby the support member is held relatively stationary to the guide structure below a threshold.

It would have been obvious to one of ordinary skill in the art to modify the invention of Yoo with the teachings of Fuller et al to provide a hitch device having disparate biasing members of unique stiffness, thereby acting as primary and secondary dampers, to promote vehicular stability for rider comfort.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoo, as applied to Claim 1, and in further view of O'Donnell et al (6,123,176).

Yoo is silent regarding the termination supported for movement with the counterweight. Attention is directed to O'Donnell et al who teach the conventional art of termination for movement with both the elevator car and counterweight (Fig. 1).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barnes (6,223,862), Fuller et al (5,750,945) and Shon (6,315,084) are cited for reference of en elevator tensioning device having thimble rods and mounted in a fixed position relative to an elevator machine; an active elevator hitch having passive and/or active biasing members of unique stiffness, wherein a second biasing member is activated in response to a sensor mounted on the hitch for engagement beyond a specified high frequency; and an apparatus for reducing vibration of an elevator car having disparate biasing members of unique stiffness and said apparatus mounted on both the elevator car and counterweight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK
6 July 2006

Kathey Matecki

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